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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,472	02/22/2002	Akito Yoshida	W2K 1077	4326
23504	7590	05/19/2005		
WEISS & MOY PC 4204 NORTH BROWN AVENUE SCOTTSDALE, AZ 85251			EXAMINER ZARNEKE, DAVID A	
			ART UNIT 2891	PAPER NUMBER

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/082,472	YOSHIDA, AKITO	
	<b>Examiner</b>	<b>Art Unit</b>	
	David A. Zarncke	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 24 March 2005.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-12, 21-26, 29 and 30 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_\_ is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 1-12, 21-26, 29, 30 are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Interview Summary***

In a telephone interview between Bill Baumeister, the examiner's supervisor, and Jeff Moy, applicant's attorney, on April 20, 2005 the office's position was clarified and applicant's options for responding to the restriction requirement were discussed.

Further, it was agreed that this written communication would be issued in order to (1) make the restriction requirement final; and (2) clarify the record by responding to applicant's arguments.

### ***Prosecution History***

First a summary of the prosecution history will be outlined.

On 10/18/02 a restriction requirement was mailed that included a product-method restriction. No species requirement was made in this restriction.

On 12/17/02 an election was made selecting the product claims drawn to a die coupled to the substrate via the metal layers wherein the flap portions are coupled to the upper surface of the die.

On 5/6/03 a non-final rejection was mailed rejecting the elected product claims (figure 6).

On 8/8/03 a response to the rejection was filed.

On 10/10/03 a final rejection was mailed.

On 2/19/04 an RCE was filed.

On 5/11/04 a non-final rejection was mailed.

On 8/9/04 an amendment was filed in which all the claims were amended to read upon an invention different from the invention previously examined. Specifically, these newly presented claims were drawn to a die wire-bonded and encapsulated to the metal layers wherein the flap portions are coupled to the upper surface of the encapsulant as opposed to the die (the species of figure 1A). While the originally prosecuted claims were drawn to a die attached to metal layers with the flap portions folded over on top of the die (the species of figure 6).

On 10/19/04, an election by original presentation was mailed noting that the present claims were drawn to a different invention from the one previously examined. As a result of (1) applicant's decision to shift the scope of the patent protection sought from the figure 6 embodiment to the figure 1A embodiment, and (2) the ensuing the election-by-original-presentation restriction, all of the figure 1A claims were withdrawn from consideration, leaving no remaining claims directed to the originally-prosecuted species. Applicant was given one month to respond.

On 12/9/04 a notice of appeal was filed and on 1/31/05 an appeal brief was filed wherein applicant appealed the election by original presentation on the grounds that it was improperly made stating that the newly presented claims merely refine the previous claims (page 7, middle paragraph) and that the restriction failed to show how the claims were independent or distinct (page 8).

On 3/2/05, a notice of defective appeal was mailed stating (1) that the appeal was improper because restrictions are not appealable subject matter, they are

petitionable subject matter; and (2) further clarifying the species restriction requirement for better customer service.

On 3/24/05, a response was filed again traversing the restriction requirement and continuing to elect the new non-elected subject matter.

On 4/5/05, a second notice of non-responsive amendment was mailed again clarifying the restriction requirement and again explaining that the elected claims are still directed to the non-elected subject matter. A one-month period of response was given to comply.

On April 20, 2005, applicant's attorney Jeffrey Moy called the examiner's supervisor, Bill Baumeister, to discuss this restriction requirement (an interview summary of this conversation is included herewith).

### ***Response to Arguments***

As noted in the non-responsive amendment mailed 4/5/05, the currently presented claims 1-12, 21-26, 29 and 30 are directed to an invention that is different from that of the previously examined claims for the reasons set forth previously and reiterated below.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1-12, 21-26, 29 and 30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

As noted previously, the currently presented claims are drawn to a different invention from the previously examined claims. The previously examined claims are drawn to a species wherein a die is coupled to the substrate via the metal layers wherein the flap portions are coupled to the upper surface of the die (figure 6). While the currently presented claims are drawn to a patentably independent and distinct species wherein a die is wire-bonded and encapsulated to the metal layers wherein the flap portions are coupled to the upper surface of the encapsulant as opposed to the die (figure 1A).

These species are different because the wire bonds of the currently presented claims change the nature of the connection of the folded flaps. Now the flaps connect to the encapsulant while in the previously examined claims the flaps connect to the upper surface of the semiconductor device. This difference in the relative positioning of the flaps is the mutually exclusive characteristic that serves as the basis of the species restriction.

In the response filed 3/24/05, applicant elected newly presented species 2 (the pending claims). This is improper because these claims are still directed to an invention that is independent from the invention to which the originally-filed product claims were directed.

In order for a response to this action to be proper, applicant must present claims that are directed to the species of the products that were originally presented and examined.

In traversing the species restriction, applicant argues that the examiner alleged neither a reason why the restriction was necessary nor a difference in classification.

In fact, the reason for the restriction is the species relationship, and a difference in classification is not required because species are related as independent inventions, not distinct inventions (MPEP 806.04). The examiner need only show a mutually exclusive feature between the two inventions.

Applicant further argued that the examiner must avoid piecemeal examination and must prove a serious burden. However, by setting forth the mutually exclusive feature that defines the species, the examiner has established a *prima facie* case of undue burden. The burden has shifted to applicant to rebut the showing that a burden exists. Applicant has not met this burden.

Regarding the “piecemeal examination” argument, please note that any undue delay in the issuance of the second, species restriction is the result of applicant’s unilateral decision to first file claims directed solely to a first species and to subsequently amend the claims so that they are now directed solely towards a patentably different second species.

Lastly, applicant states that the RCE filed entitles applicant to an examination of the claims on the merits. The fact that an RCE has been filed has no bearing on the present restriction issue. The basis of restriction practice is to limit the application to one invention (MPEP 802). As detailed above, the presently presented claims are directed to an invention different from the one previously examined. The mere filing of an RCE does not affect the Office’s right to restrict the application to one invention.

To summarize, this application contains claims 1-12, 21-26, 29 and 30 drawn to an invention nonelected with traverse. A complete reply to this final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

The reply filed on 3/24/05 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): the claims remaining in the application are drawn to a non-elected species. See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Accordingly, this restriction requirement is made **FINAL**.

### ***Conclusion***

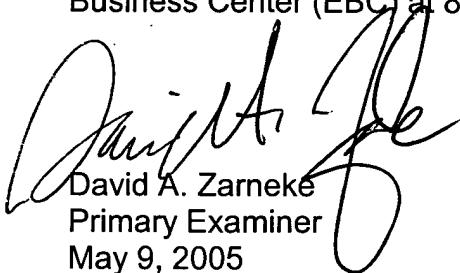
Therefore, as noted above, there currently are no claims present in this application. An election of species 2 is not a permitted response because species 2 is an invention different from the examined invention. The present claims are subject to withdrawal based upon original presentation (MPEP § 821.03).

This application contains claims 1-12, 21-26, 29 and 30 drawn to an invention nonelected with traverse. A complete reply must include cancellation of nonelected claims and presentation of the previously examined claims (37 CFR 1.144) See MPEP § 821.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Zarneke whose telephone number is (571)-272-1937. The examiner can normally be reached on M-Th 7:30 AM-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumesiter can be reached on (571)-272-1712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David A. Zarneke  
Primary Examiner  
May 9, 2005